



Reading files (75)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street
San Francisco, Ca. 94105

March 1, 1991

Mr. Nick Rieger
Elko District Office
Bureau of Land Management
3900 E. Idaho Street
P.O. Box 831
Elko, Nevada 89801

Dear Mr. Rieger:

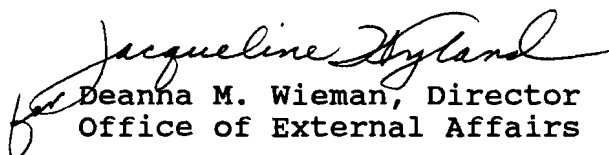
The Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement (DEIS) for **Betze Project, Barrick Goldstrike Mines, Inc., Elko, Nevada**. Our comments on the DEIS are provided pursuant to the National Environmental Policy Act (NEPA) and EPA's authorities under section 309 of the Clean Air Act.

The Betze Project DEIS identifies and analyzes the proposed expansion of an existing gold mining operation, which would include the additional excavation of a 345-acre parcel to a depth of 1800 feet below ground surface. The proposed operation expansion would also include the disturbance of another 1800 acres for a heap leach pad, tailings impoundment, waste rock disposal area, stockpiles, haul roads, pipeline corridors, and construction areas. The expanded operation would permit recovery of 15.1 million ounces of gold from the excavated and processed ore over a twenty-year period.

We have classified this DEIS as EC-2 -- Environmental Concerns-Insufficient Information (see enclosed "Summary of Rating Definitions and Follow-Up Action"). Our rating reflects our concerns regarding the potential significant impacts to water quality and wetland/riparian habitats as a result of effluent discharge and groundwater drawdown during and after project implementation. We also recommend that BLM select the alternative to place the ore stockpile on the completed South Block waste rock disposal area or on the spent AA Heap Leach pads rather than in the locations of the proposed alternative. In addition, further detail regarding monitoring and mitigation is necessary and should be provided in the Final Environmental Impact Statement (FEIS). Our detailed comments regarding the DEIS are attached.

We appreciate the opportunity to review this DEIS. Please send three copies of the FEIS to this office at the same time it is officially filed with our Washington, D.C., office. If you have any questions, please contact Dr. Jacqueline Wyland at (FTS) 848-1584 or Jeanne Dunn Geselbracht at FTS 848-1576.

Sincerely,


for Deanna M. Wieman, Director
Office of External Affairs

91-025
001010

Enclosures

cc: NDEP

Water Resources Issues

1. Based on the discussion in the DEIS regarding the ore stockpiles, it appears that the potential adverse impacts to groundwater quality are greater under the proposed ore stockpile alternative than under the South Block or AA Heap Leach Pad alternatives. EPA recommends that the alternatives to place the ore stockpile on the completed South Block waste rock disposal area or on the spent AA Heap Leach pads be selected over the proposed alternative.

2. Ongoing key monitoring programs are required to pinpoint the location and extent of adverse impacts to water quality that may occur as a result of this project. Monitoring should be conducted for all parameters that have water quality standards. Data from the monitoring programs need to be reviewed frequently throughout the duration of the project for water quality degradation. Violations of water quality standards from the National Pollutant Discharge Elimination System (NPDES) permit could result in enforcement actions. Violation of a nonpoint nature would result in revised best management practices and controls to maintain water quality. Should degradation occur with sufficient magnitude and frequency, mitigation should be required. Mitigation would preferably involve providing higher quality water to on-site degraded water to offset the degradation. Another less preferable option would be the creation of a new off-site habitat close to the site of degradation.

3. Water pumped from deep wells could be as warm as 130° F. The FEIS should discuss monitoring and mitigation measures that would be taken to ensure that water temperatures would not be damaging to beneficial uses, vegetation, or aquatic resources.

4. Water quality of the inflow to the TS Ranch Reservoir appears to violate existing water quality standards for the following toxic pollutants as contained in Nevada Administrative Code (NAC) 445.1339: boron, cyanide, fluoride, and thallium. BLM should consult with the Nevada Department of Environmental Protection (NDEP) to ascertain the applicability of these standards to this reservoir.

5. The proposed action would result in a large body of water in the Betze Pit. This body of water would be classified by NDEP and subject to water quality standards. In addition to class standards or specific standards assigned to the Betze Pit waterbody, statewide toxic standards contained in the NAC 445.1339 would apply. Also, federal water quality standards may be promulgated that expand the list of water quality standards for

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toxic pollutants in waters of Nevada. Long-term compliance with existing and proposed water quality standards in this newly created waterbody should be addressed in the FEIS.

6. Increases in construction activity could result in increased erosion and surface water quality degradation. The FEIS should address procedures that would be used to minimize these adverse impacts.

Wetland and Riparian Issues

1. EPA is extremely concerned about the substantial volume of water that would be drawn from the aquifer in order to dewater the Betze Pit. Groundwater drawdown could have significant long-term adverse impacts on up to 271 acres of wetland and riparian habitats as well as on the wildlife that use them. Wetland and riparian areas are essential to maintaining biodiversity and healthy wildlife populations in Nevada. EPA urges BLM to require monitoring and mitigation of the wetland and riparian losses as a condition to the permit or operating plan. A habitat replacement fund or other mitigation, such as acre-for-acre replacement of wetland and riparian habitat losses, would be appropriate in light of the potentially extensive losses that could result to the project vicinity. The FEIS should discuss in detail a monitoring program to ensure the detection of sites as they become affected, as well as an enforceable mitigation plan (e.g., location and acreage of replacement land, quality/value of replacement habitat, specific measures to enhance or create replacement habitat, long-term monitoring to ensure success of the measure).

2. According to page 4-52 (paragraph 1) of the DEIS, 271 acres of riparian/aquatic habitat could be affected by drawdown of the groundwater during the recovery period. According to page 2-53 (paragraph 1), however, only 159 acres could be affected. The FEIS should clarify this discrepancy.

Environmental Impact of the ActionIO—Lack of Objections

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC—Environmental Concerns

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

EO—Environmental Objections

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU—Environmentally Unsatisfactory

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of environmental quality, public health or welfare. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

Adequacy of the Impact StatementCategory 1—Adequate

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2—Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3—Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From: EPA Manual 1640, "Policy and Procedures for the Review of Federal Actions Impacting the Environment."